FURUNO

MULTI FUNCTION DISPLAY

MFD8/MFD12

User's Handbook

The purpose of this User's Handbook is to provide everyday operating procedures for this equipment. For more detailed information see the Operator's Manual.

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FURUNO ELECTRIC CO., LTD.

www.furuno.co.jp

PUB. NO. OME-44441-A
(0804, DAMI) MFD8/MFD12

00016781510

Operating Controls

Go to cursor location

GO TO LIST Momentary push

Cursor

Own ship

Showing points list

GO TO LIST Long push

Adjusting audio volume

DATA VOL Long push

Audio volume level

Adjust. Confirm.

Data boxes on/off

DATA VOL Momentary push

Moving the cursor

Cursor moves in direction of arrow or diagonal pushed.

Finding object information

Showing pop-up menu

Place cursor with

Push

Manual Mode
Go To
Point by Lat/Long
New Point
New Route

Entering a point

Place cursor with Cursorpad.

POINTS ROUTE Momentary push

See page 9 for details.

Creating a route

Place cursor with Cursorpad.

POINTS ROUTE Long push

Use Cursorpad and **left-click** button ( ) to create a route.
See page 10 for details.

Canceling entry

CANCEL Push to cancel last entry.

Adjusting gain, sea and rain clutters

GAIN TX Momentary push

Radar
Gain
Sea
Rain

Select Gain, Sea or Rain.

Fish finder
GainHF 0 %
GainLF 0 %

Select HF or LF.

TX, STBY

GAIN TX Long push

Toggle TX, STBY in radar.

Adjust. Confirm.

Selecting a display

DISP

Rotate to select display; push to confirm.
(For details, see page 6.)

Showing the soft controls

Push

For RotoKey operation,
see page 3.

Menu operation

MENU

Choose menu. Confirm.

Switching active display

CTRL

ACTIVE

ACTIVE

CTRL

Selecting range

OUT RANGE IN

OUT: Increase range

IN: Decrease range

Scrolling the display (pad)

Scroll the radar, chart plotter display in the direction of the arrow or diagonal pressed.

Saving point at current position

SAVE MOB Momentary push

PT-0001 Point

Marking MOB position

SAVE MOB Long push

MOB MOB mark

Centering own ship

SHIP Momentary push

Power on/off

ON: Momentary push
OFF: Long push (3 sec)

Adjusting brilliance, panel dimmer

Push

Brill/Dimmer

Rotate to adjust; push to confirm.

3D display on/off

2D display *3D aerial view display*

SHIP

Long push to get 3D display

Long push again to get 2D display

How to Use the Controls

Keys

Discrete keys provide the function(s) labeled on their keys. A key with dual functions; for example POINTS ROUTE , has a line separating the two functions. Access the top function with a momentary push, the bottom function with a long push (about three seconds).

⇨ Place point at cursor position.

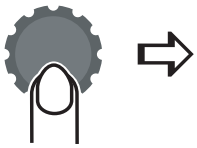
Momentary push

⇨ Create a route.

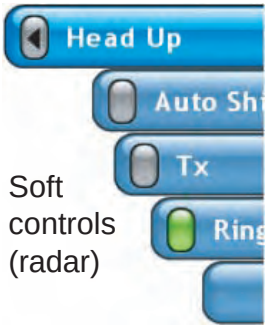
Long push

RotoKey and soft controls

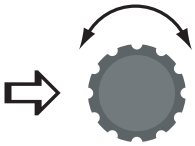
- Access by rotating or pushing .
- They change depending on mode or function in use.
- Long push to show full set of soft controls for current mode.



Push to show soft controls for current mode.



Soft controls (radar)



Select soft control.

Confirm.

The cursor

The cursor mainly functions to

- measure the range and bearing to a location on the radar and chart plotter
- select position for a point and point route

It takes on one of two configurations depending on its state.

: Inactive

: Active (in motion)

Using the SD Cards

Care and handling of SD cards

- Handle SD cards carefully. Careless handling can damage the card and destroy its contents.
- Ensure the lid is closed at all times.
- Remove the card with only your fingers. Do not use metallic instruments (such as tweezers, etc.).
- Do not remove a card during either reading or writing to the card.

Inserting an SD card

1. Pull the tab on the card drive lid to open the card drive.
2. Insert the SD card in either card drive as shown right, with the label up. It should go in easily. If it is doesn't, do not try to force it.
3. Push the card until it is in place and then close the lid.

Removing an SD card

1. Pull the tab on the card drive lid to open the card drive.
2. Push in the card until it pops out.
3. Remove the card with your fingers and then close the lid.

General

Selecting a range

•Press **RANGE OUT** to increase the range.

•Press **RANGE IN** to decrease the range.

Scrolling the chart, radar picture

Press arrow or diagonal to scroll chart, radar picture.

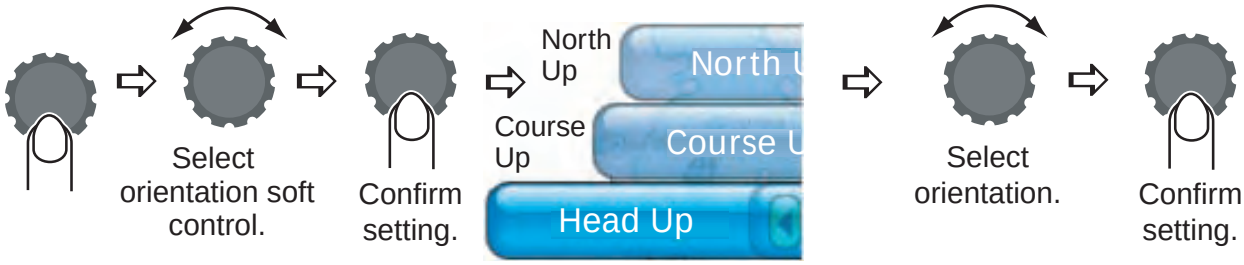
Returning own ship icon to screen center

The own ship icon marks your vessel's position. If you can't find it on the chart, or you wish to re-center it on the radar or chart plotter, push the **SHIP/3D** button to return it to the screen center.

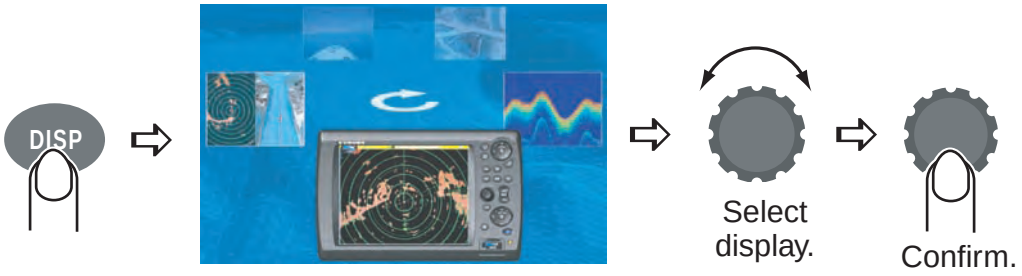
Chart, radar picture orientation

Chart, radar picture orientation is available in Head-up, North-up and Course-up.

Head-up: Chart with current compass heading upward.
North-up: Orientation fixed with true north upward.
Course-up: Destination is always at the screen top.



Selecting a display



Presetting the display selection screen

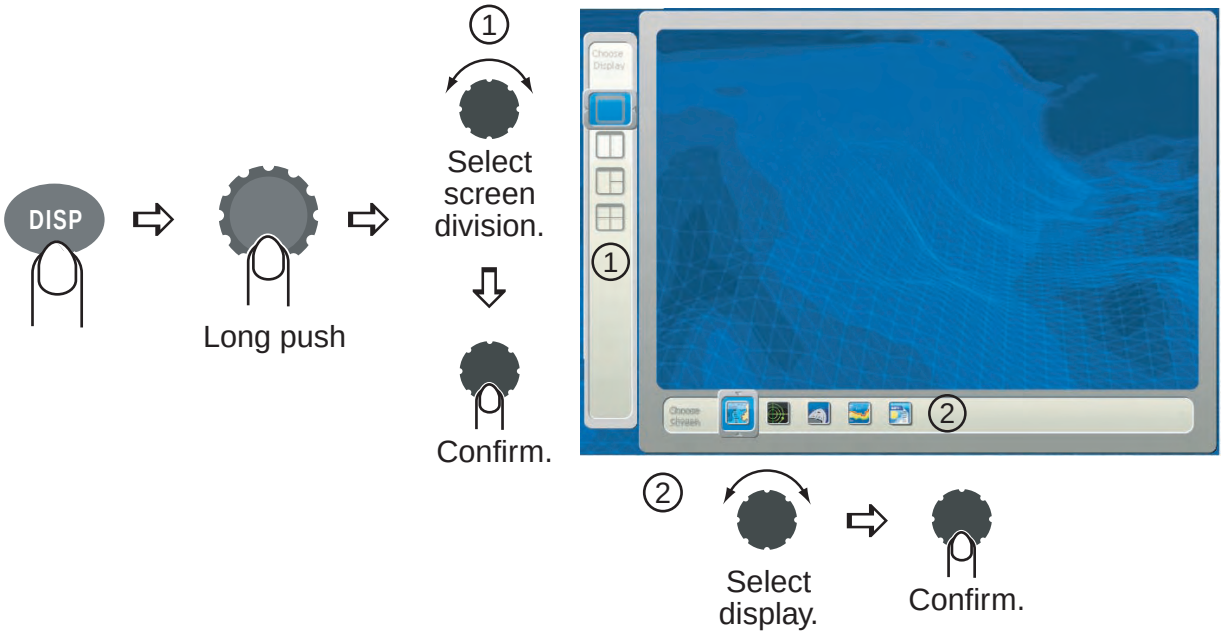
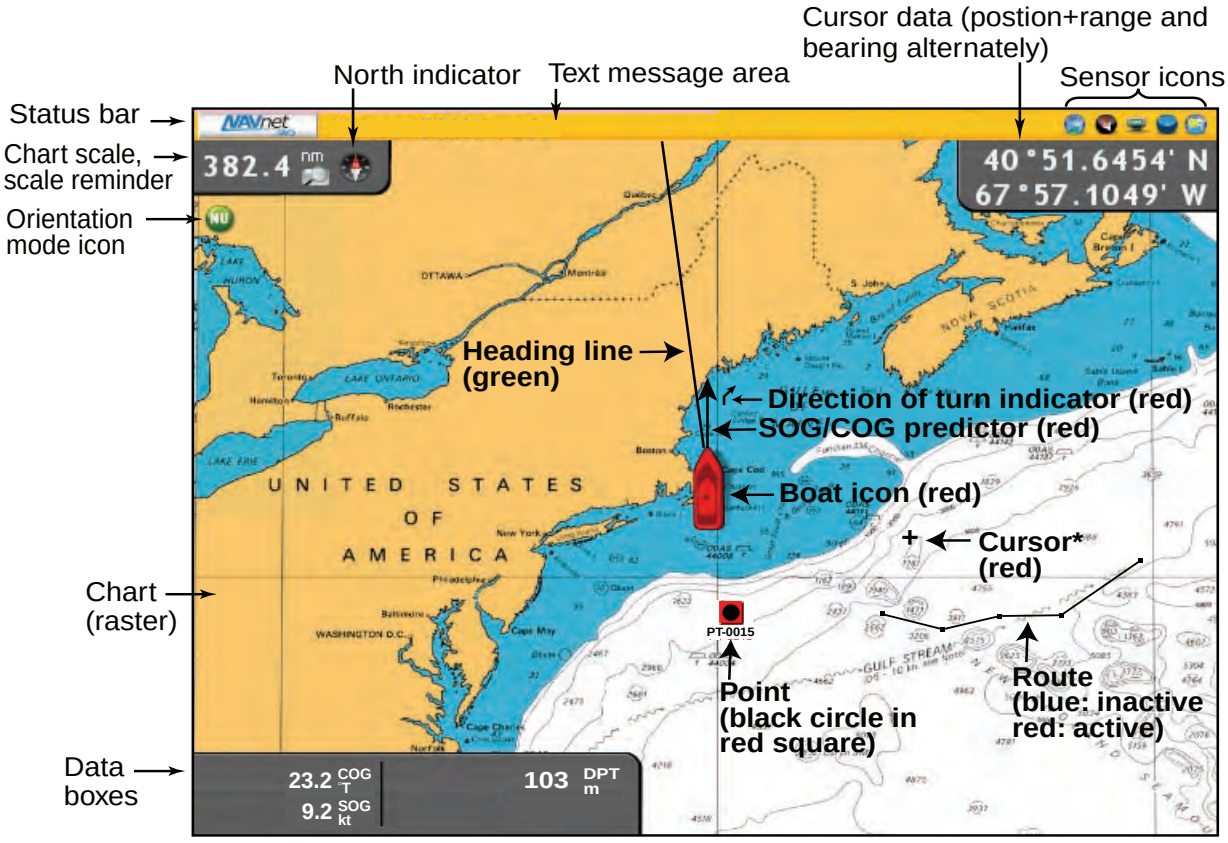


Chart Plotter

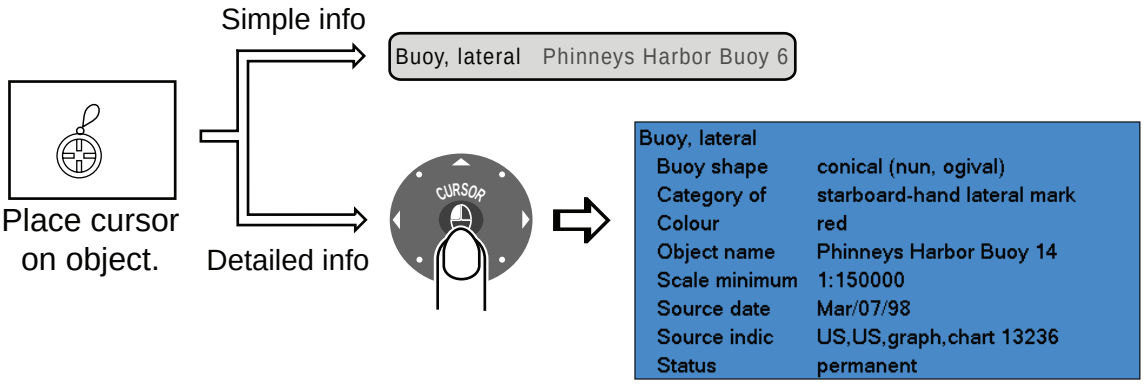
Chart plotter display



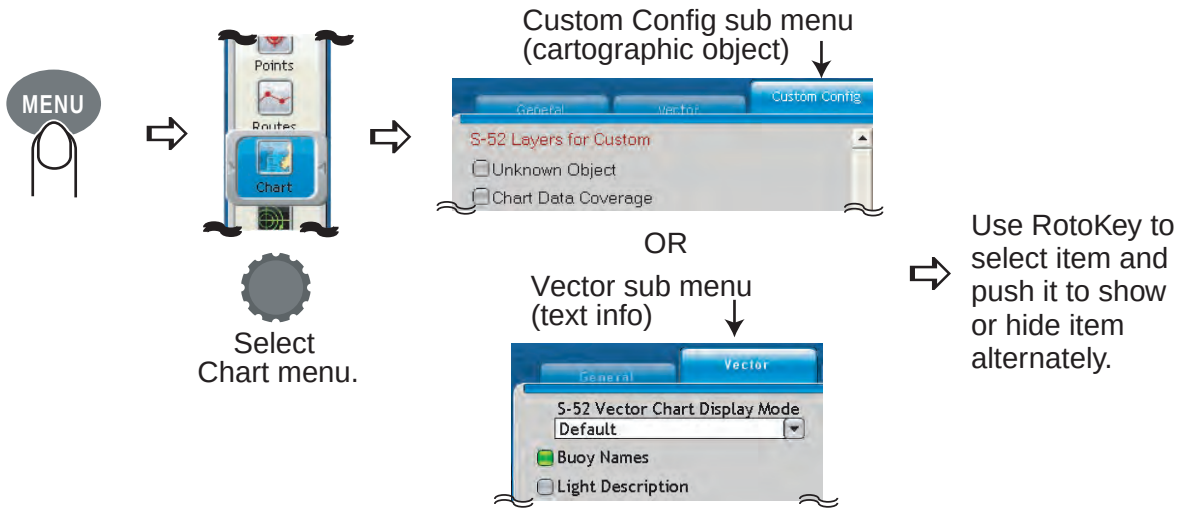
* Inactive cursor. Active cursor looks like this .

Cartographic features

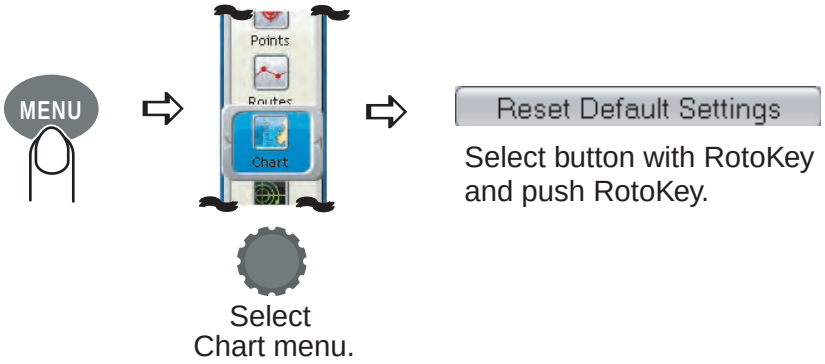
Finding information about a cartographic object



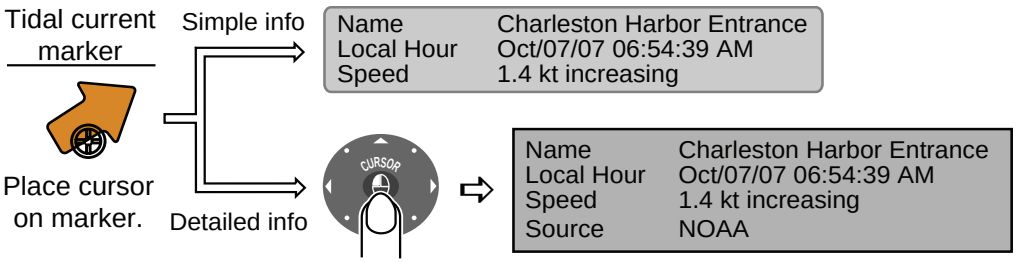
Hiding/Showing cartographic features, text information

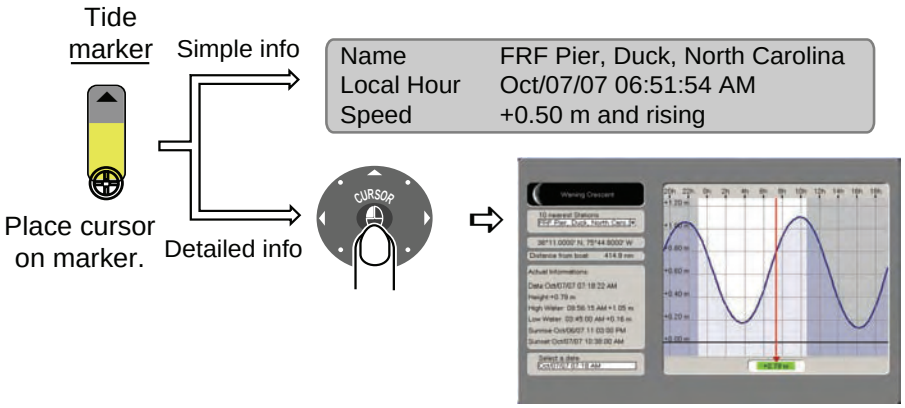


Restoring default cartographic features



Showing tidal current and tide information





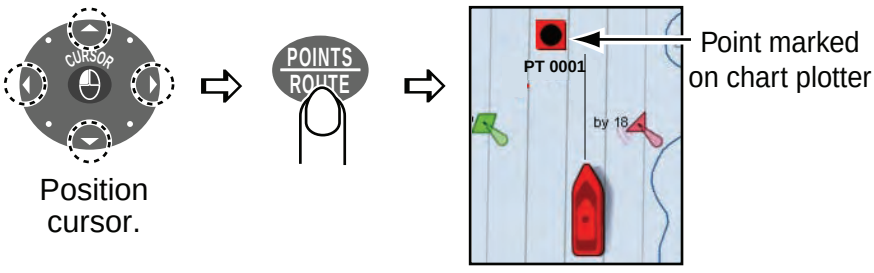
Tide graph

How to use points

A point marks a geographical position on the chart plotter. You can mark points at the cursor position, ship's position, or at a specified location. Points are marked on the screen with the waypoint symbols(●) and waypoint numbers. Points are stored in the points list, where you can edit, delete or group waypoints as desired.

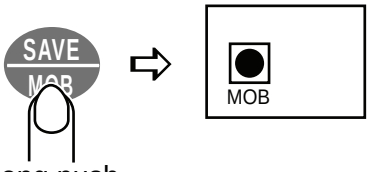
Placing a point

At cursor location

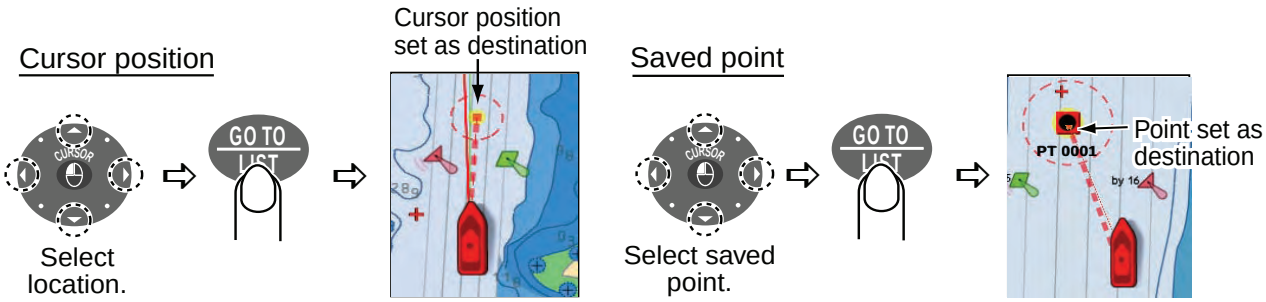


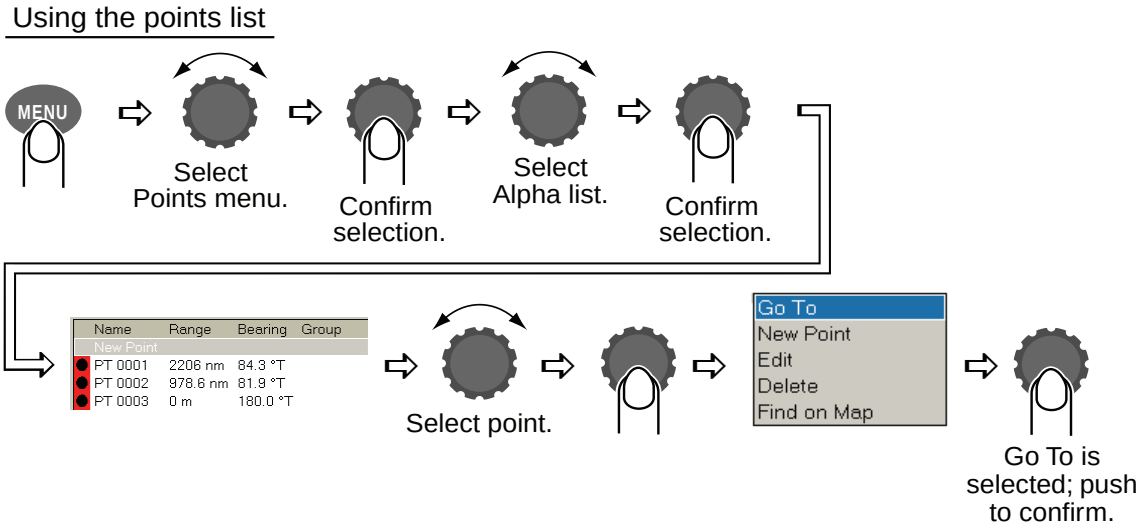
At own ship's position

TIP!
Marking MOB position



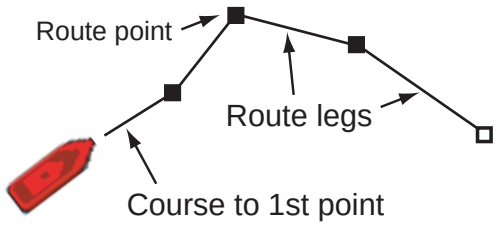
Going to a point



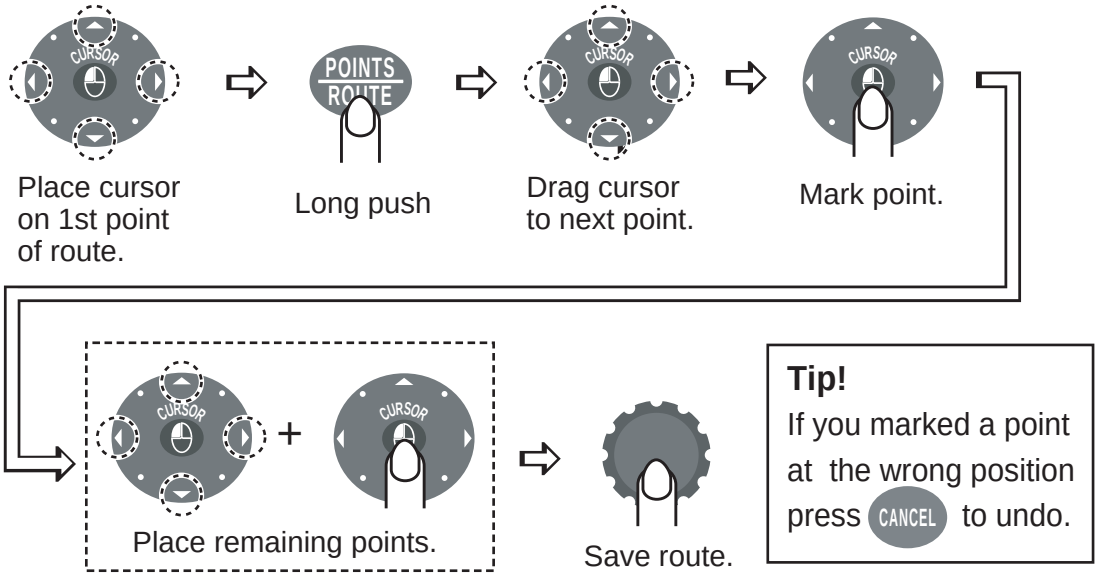


Routes

A route consists of a series of points leading to ultimate destination. Routes are stored in the Routes list, where you can edit or delete routes as necessary.



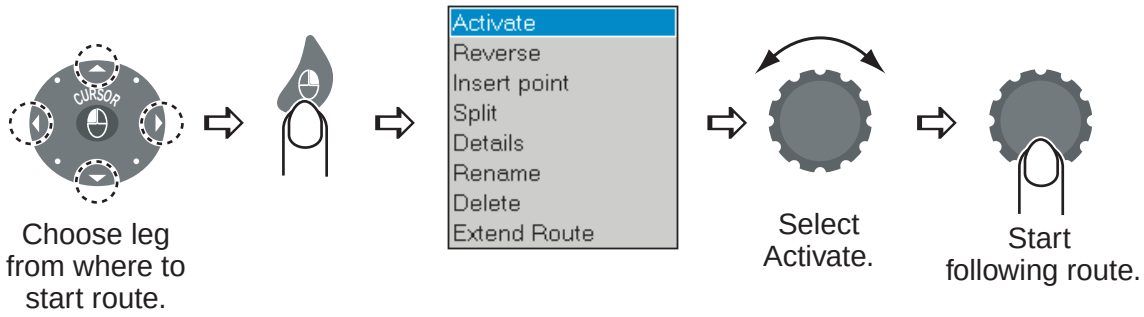
Creating a route



Tip!
If you marked a point at the wrong position press CANCEL to undo.

Following a route

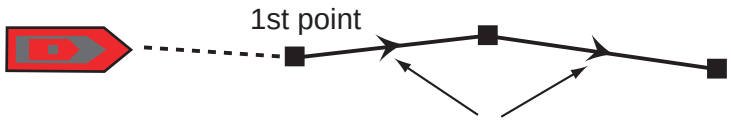
On-screen route



Choose leg from where to start route.

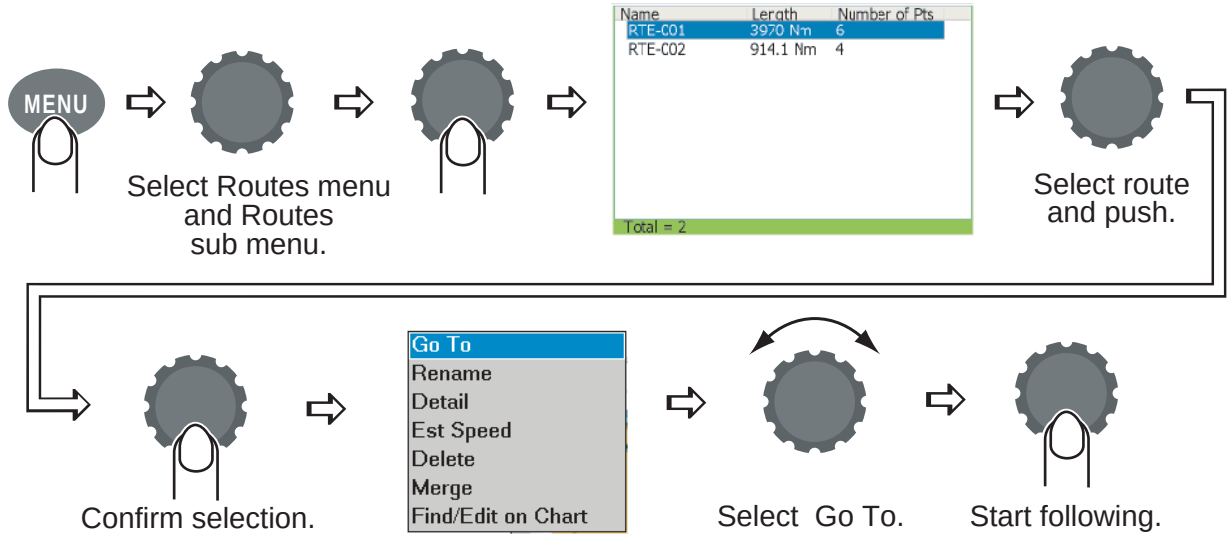
Select Activate.

Start following route.



Arrows show direction to follow.

Route on Routes list



Select Routes menu and Routes sub menu.

Select route and push.

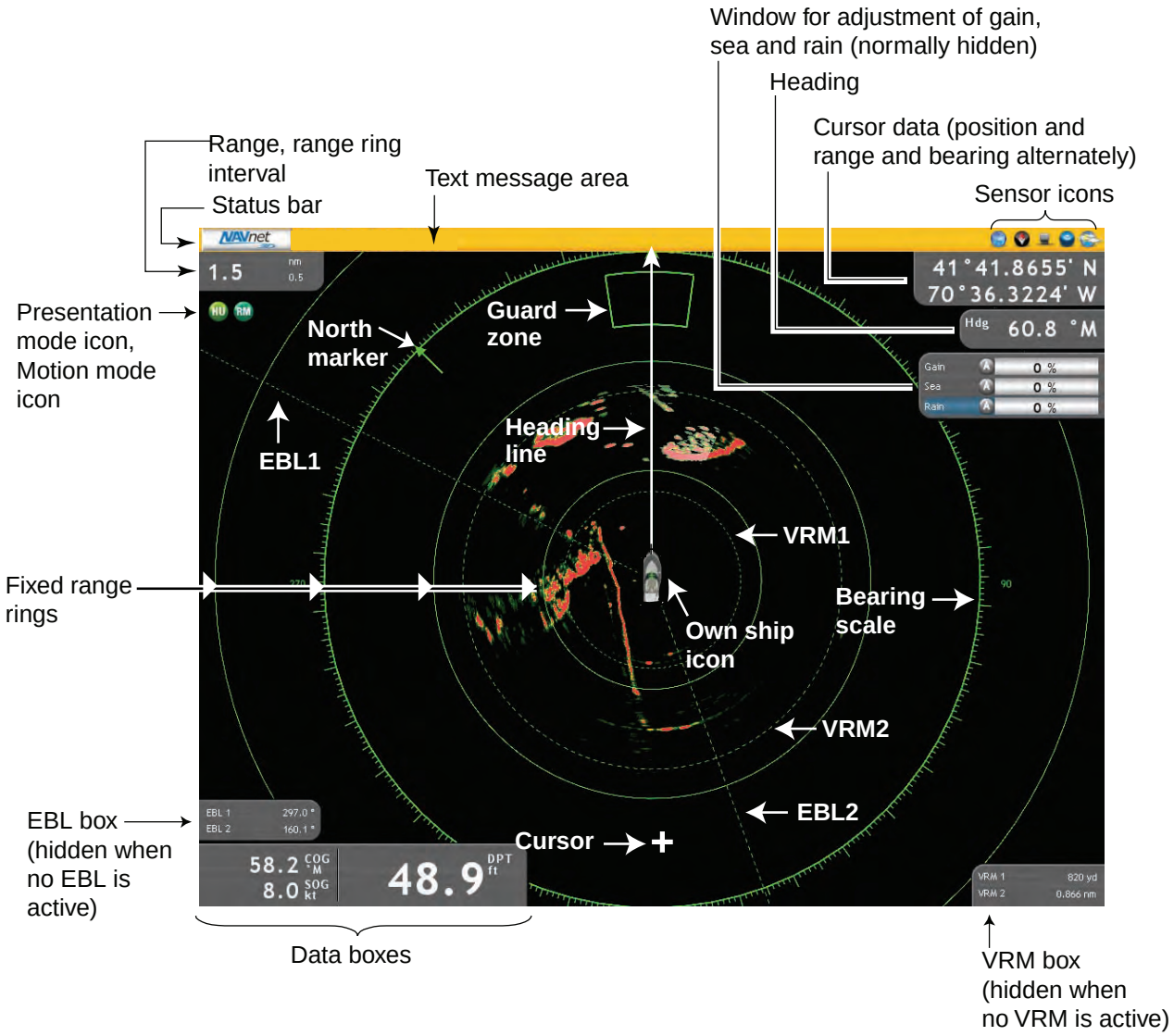
Confirm selection.

Select Go To.

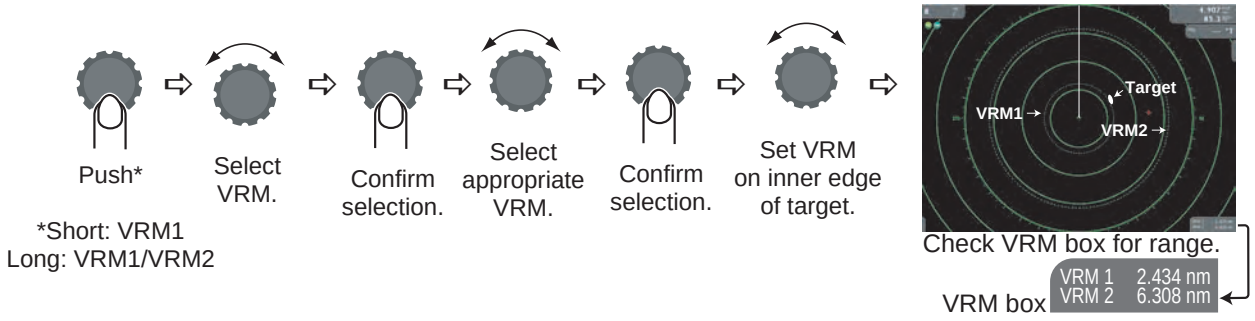
Start following.

Radar

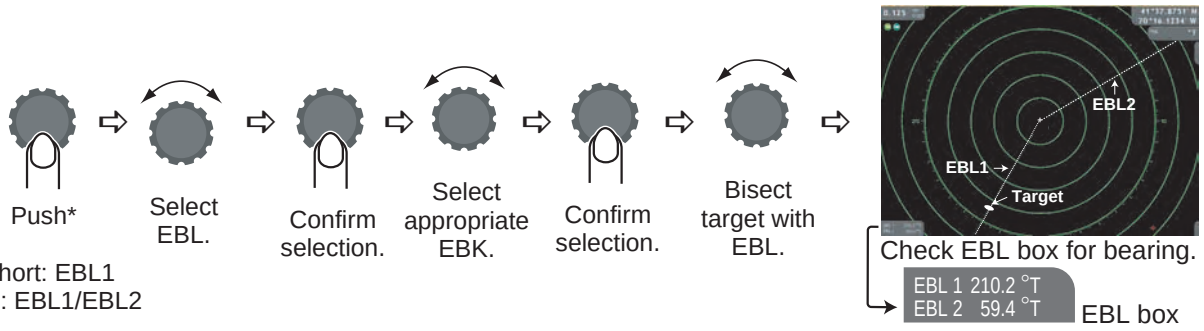
Radar display



Measuring distance to a target



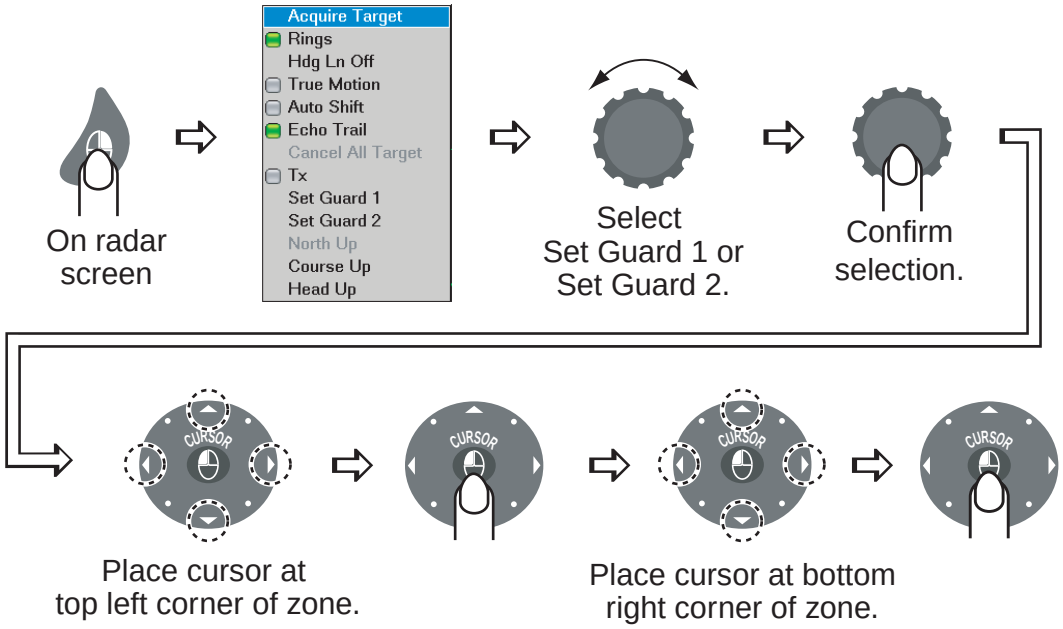
Measuring bearing to a target



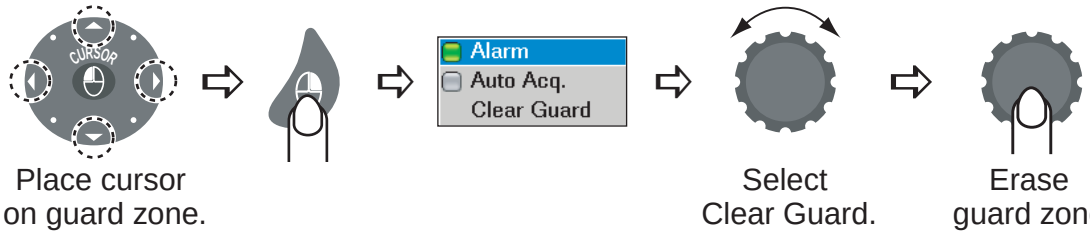
*Short: EBL1
Long: EBL1/EBL2

Setting a guard zone

A guard zone alerts you with audio and visual indications when a target enters the alarm zone.



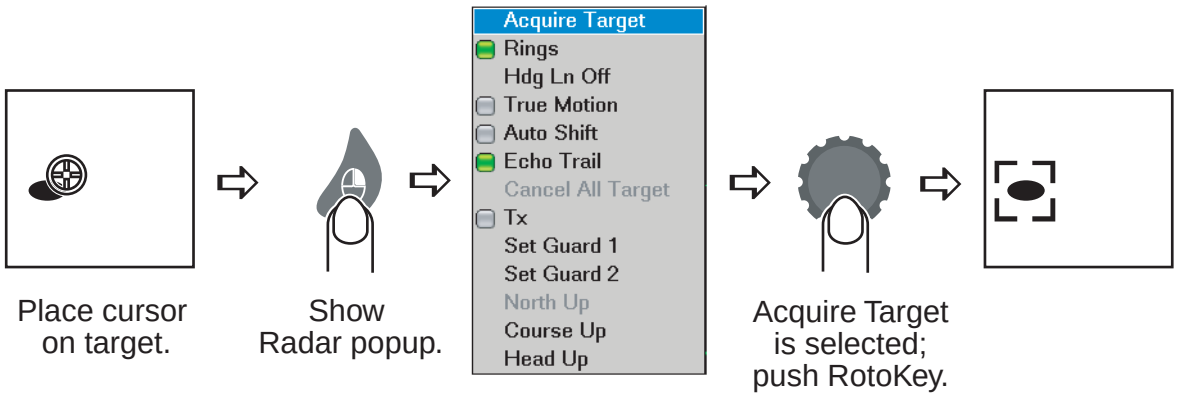
To cancel a guard zone:



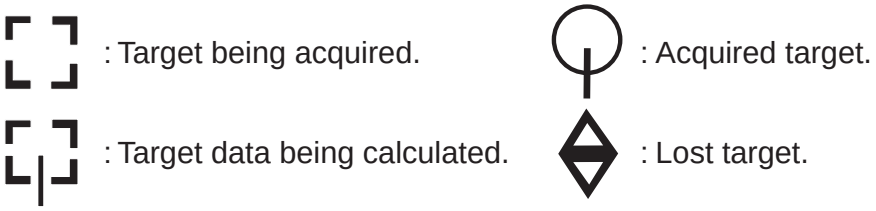
Using ARPA

The Automatic Radar Plotting Aid (ARPA) is a radar function for target tracking and collision avoidance. ARPA tracks and provides detailed information for up to 30 targets. You can track targets automatically, manually or a combination of both.

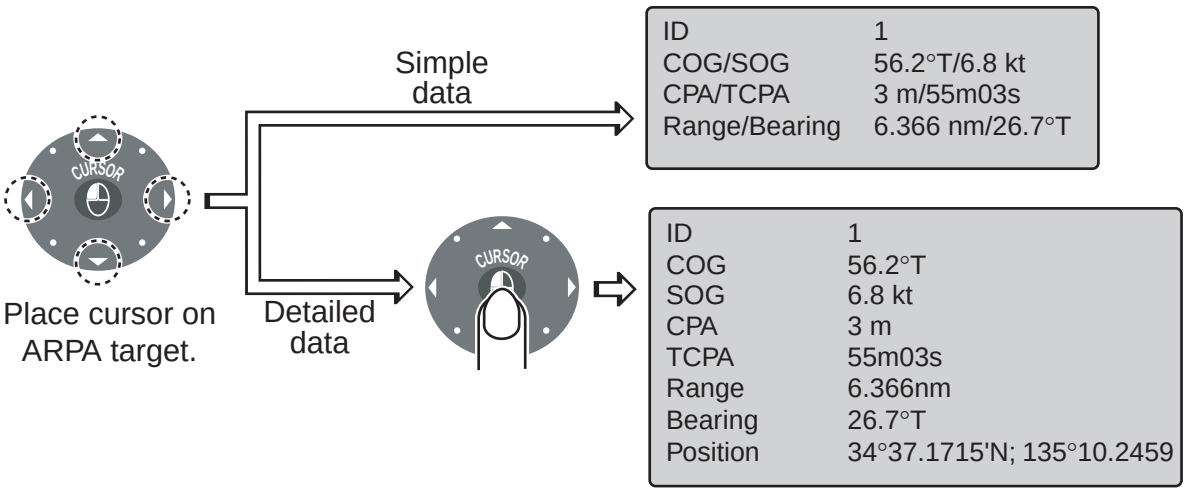
Manually acquiring a target



ARPA target symbols

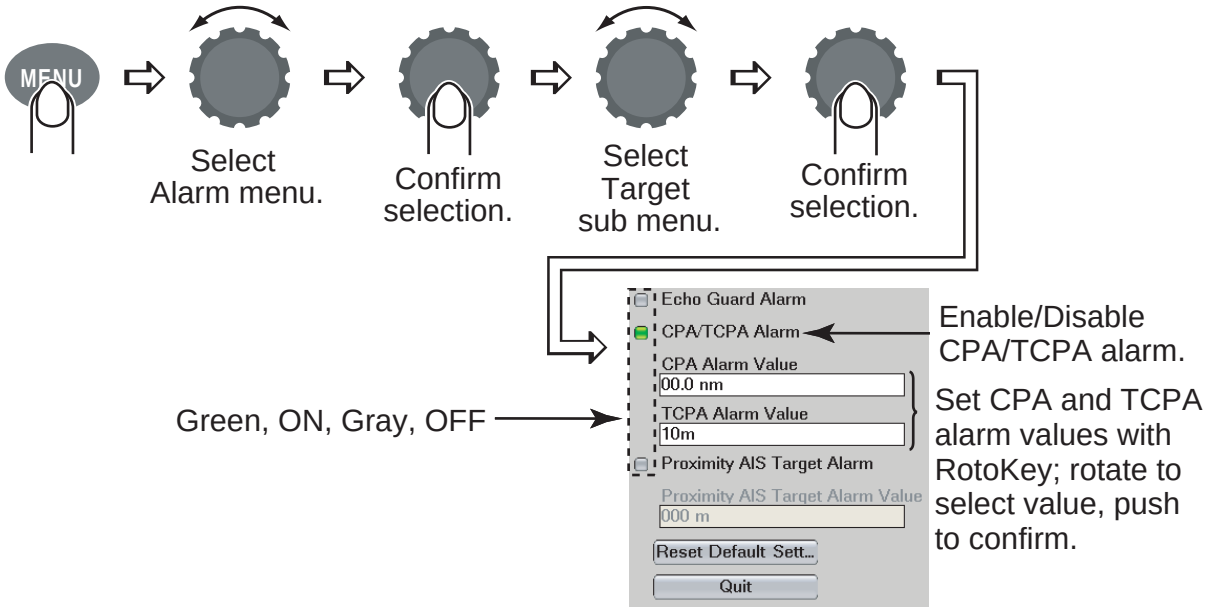


Showing target data

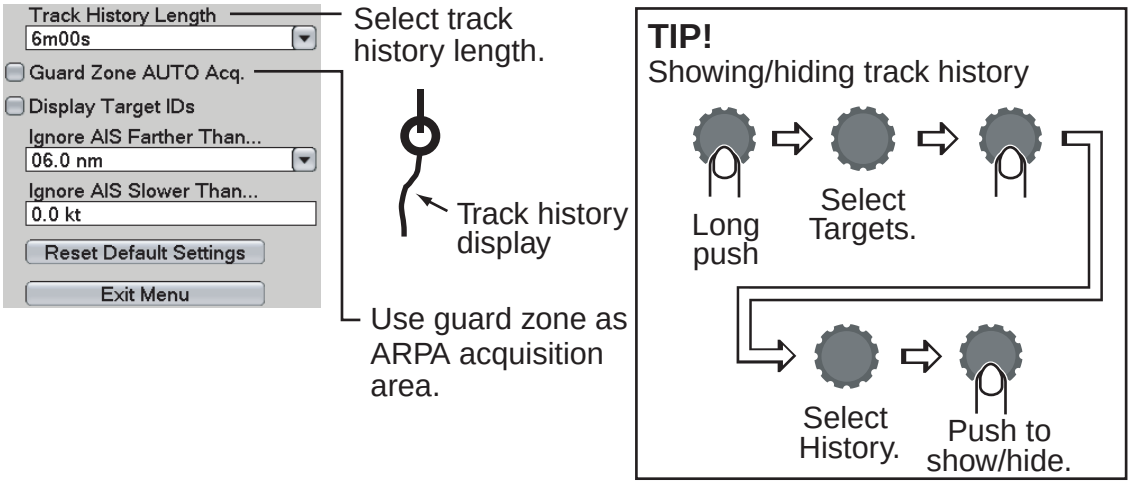


CPA/TCPA alarm

The CPA/TCPA alarm alerts you (with audio and visual alarms) when a tracked target violates the selected limits.

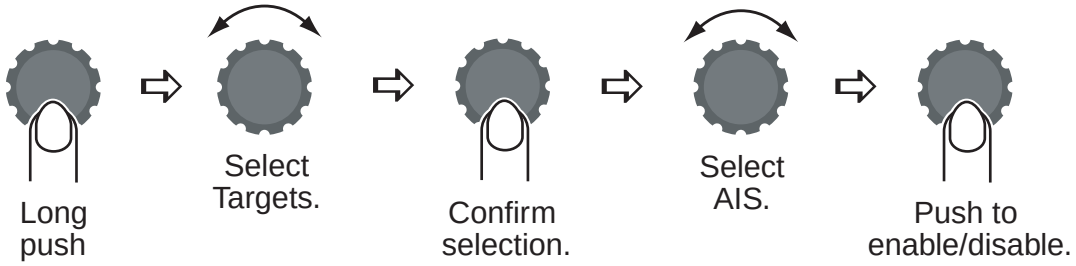


Targets menu operation

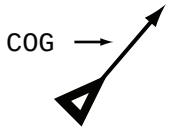
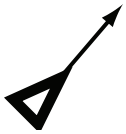


AIS

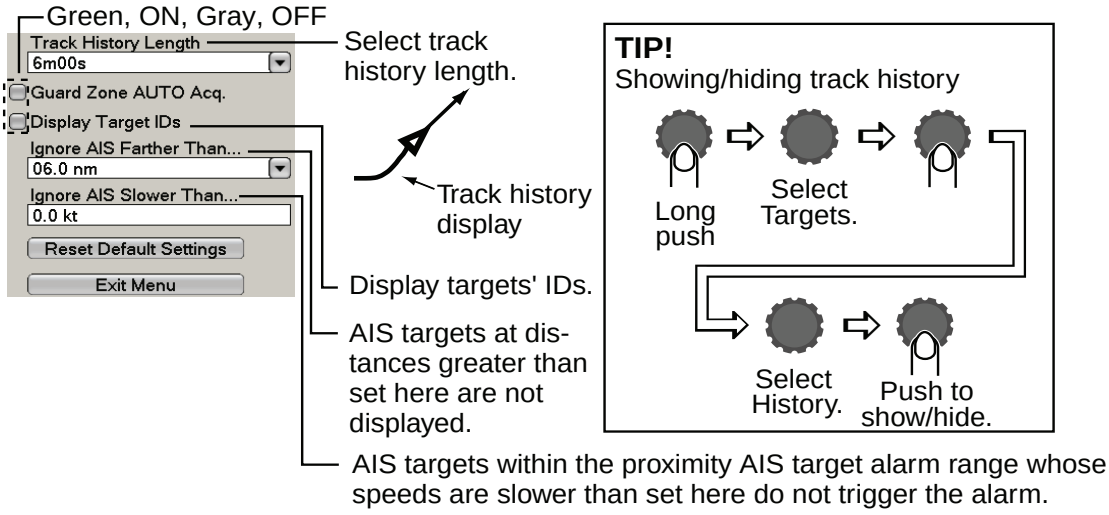
Enabling, disabling AIS



AIS target symbols

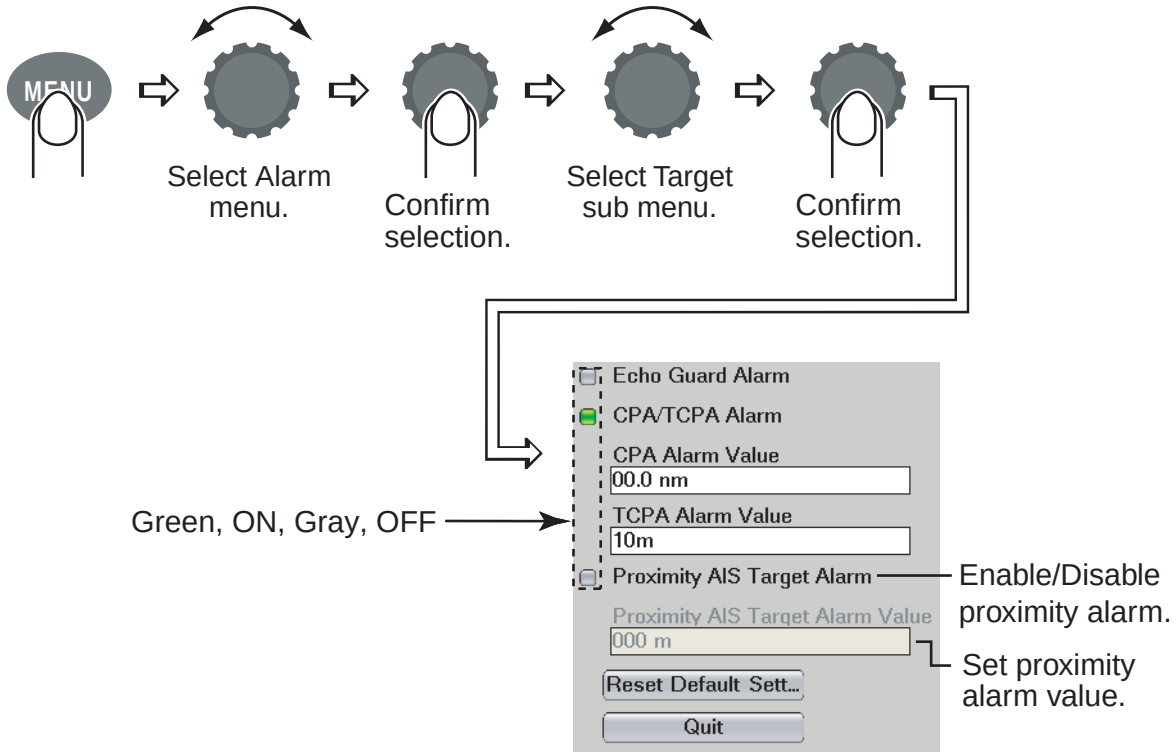
Symbol	Target type	Color
	AIS target	Blue
	Dangerous AIS target	Red
	Lost AIS target	Blue

Targets menu operation

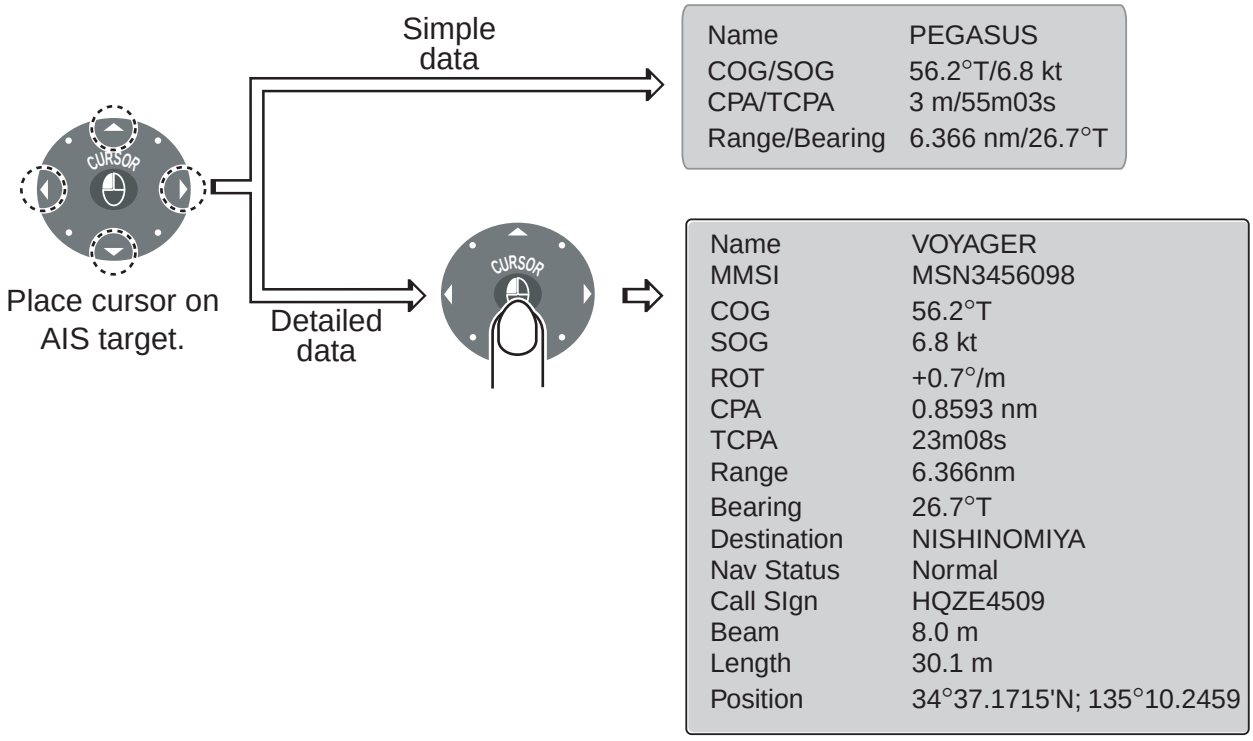

Green, ON, Gray, OFF
Track History Length
6m00s
Guard Zone AUTO Acq.
Display Target IDs
Ignore AIS Farther Than...
06.0 nm
Ignore AIS Slower Than...
0.0 kt
Reset Default Settings
Exit Menu
Select track history length.
Track history display
Display targets' IDs.
AIS targets at distances greater than set here are not displayed.
AIS targets within the proximity AIS target alarm range whose speeds are slower than set here do not trigger the alarm.
TIP!
Showing/hiding track history
Long push
Select Targets.
Select History.
Push to show/hide.

AIS proximity alarm

The AIS proximity alarm alerts you (with audio and visual alarms) when an AIS targets comes within a specific distance.

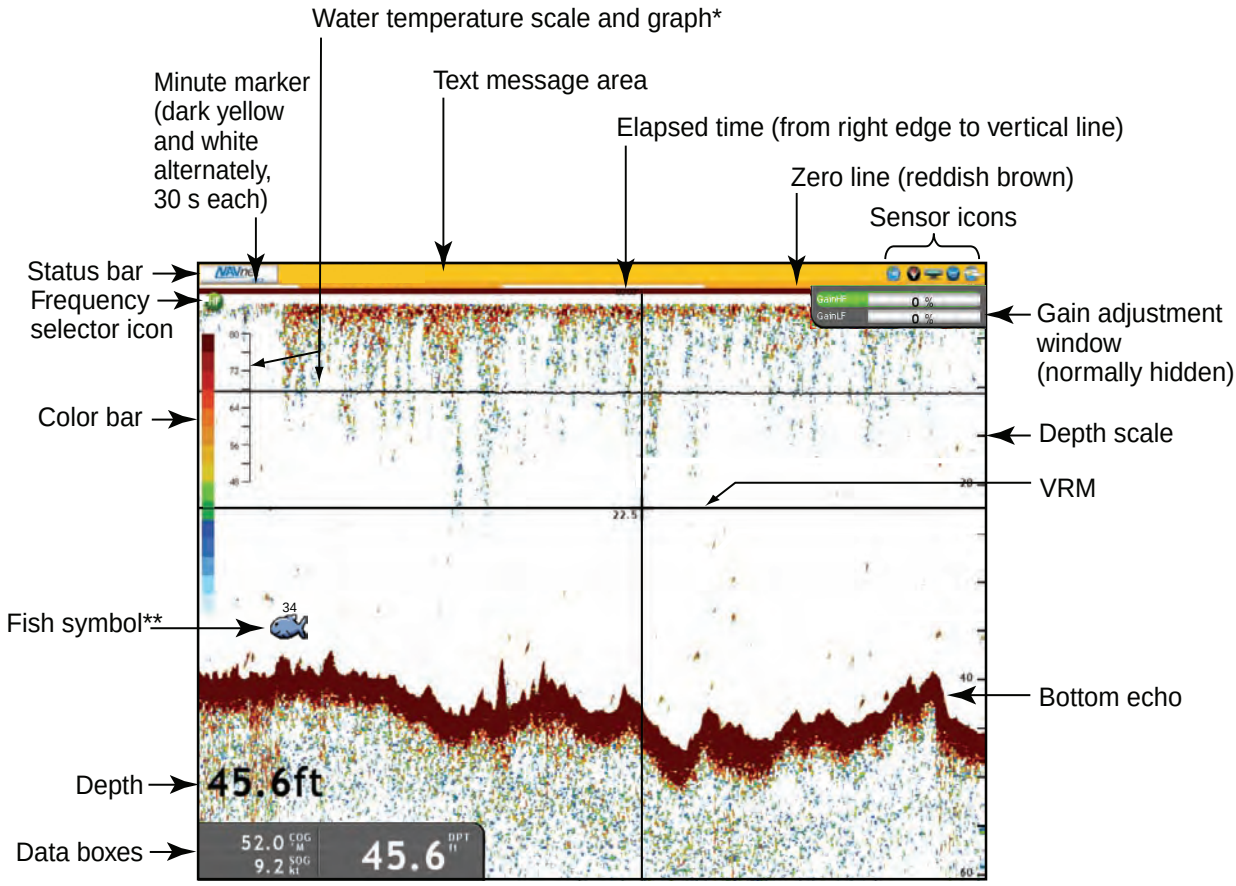


Showing AIS target data



Fish Finder

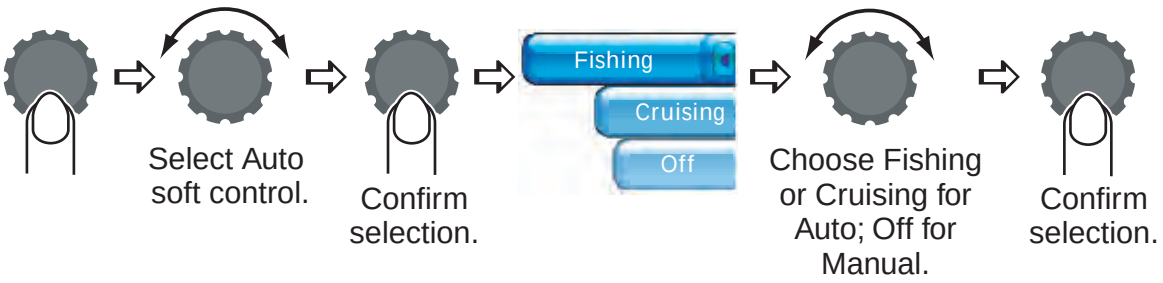
Fish finder display



* Requires water temperature sensor.
**ACCU-FISH feature estimates length of individual fish.
(Requires DFF series network sounder. Transducer 50/200-1T required in case of DFF3.)

Selecting automatic or manual operation

Your fish finder can be operated automatically or manually. In automatic operation, range, gain and clutter are automatically adjusted.



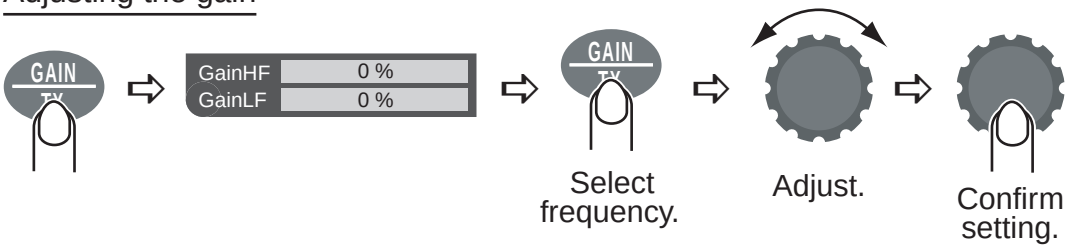
Manual operation

Selecting a range

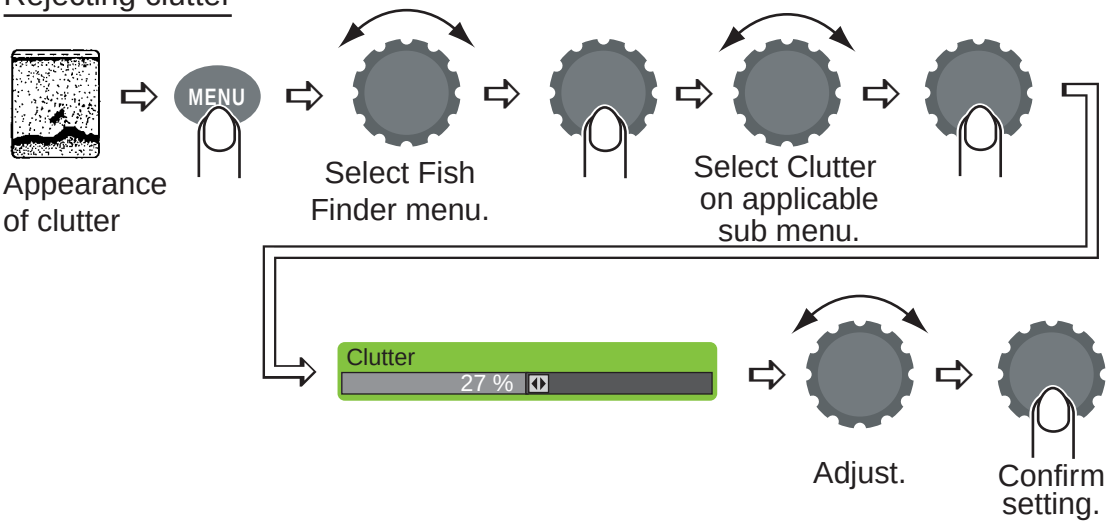
- Press **RANGE OUT** to increase the range.

- Press **RANGE IN** to decrease the range.

Adjusting the gain



Rejecting clutter

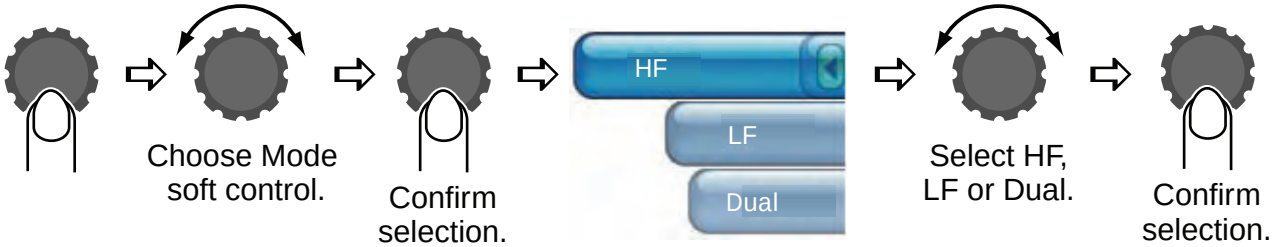


Selecting operating frequency

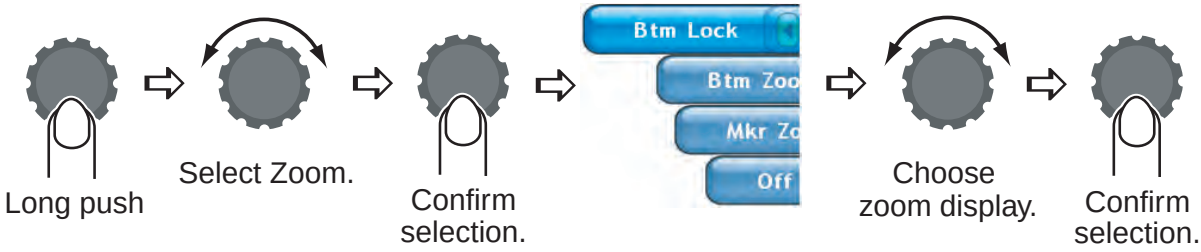
Low frequency: Use for general detection and judging bottom conditions.

High frequency: Use for detailed observation.

Dual: Both high and low frequencies.

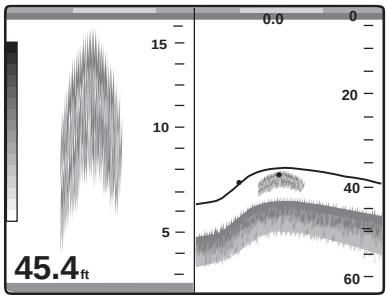


Zoom display



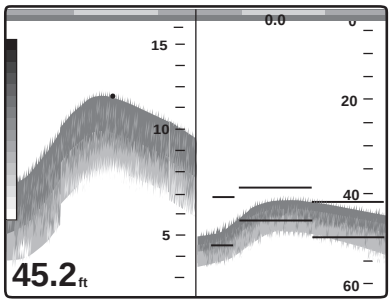
Long push → Select Zoom. → Confirm selection. → Choose zoom display. → Confirm selection.

Bottom Lock



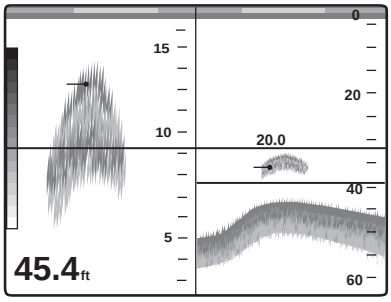
For detecting bottom fish.

Bottom Zoom



For discriminating bottom fish from bottom echo.
Short bottom tail: Soft bottom
Long bottom tail: Hard bottom

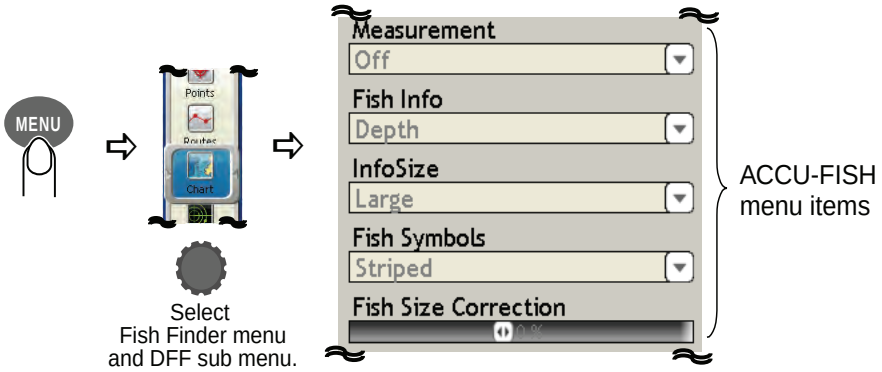
Marker Zoom



For expanding a specific location.

ACCU-FISH

ACCU-FISH, available with a DFF series network sounder (DFF3 requires transducer 50/200 1T), measures the depth and length of individual fish, showing measured fish with a symbol and length or depth indication.



Select Fish Finder menu and DFF sub menu.

Measurement: Enable/Disable ACCU-FISH.

Fish Info: Show fish length or depth (in red).

Info Size: Set size of numeric indication to large or small.

Fish Symbols: Select desired fish symbol from solid or striped.
Size is either large or small depending on length.

Solid (Small) | Solid (Large) | Striped (Small) | Striped (Large)

Fish Size Correction: If the length indication is wrong apply offset here.